Understanding how the bladder works: News from the bench
Poster Session 38

**Location:** Green Area, Room 11

**Chairs:** T. Antunes Lopes, Porto (PT)  
M. Gotoh, Nagoya (JP)  
K. Monastyrskaia, Bern (CH)

Poster viewing of 20 minutes. Presentations will take place on stage. Standard presentations are 2 minutes in length, followed by 2 minutes for discussion.

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Urothelial ATP is implicated in the appearance of detrusor underactivity (DU) early after bladder outlet obstruction (BOO) and in the recovery of detrusor function after obstruction relief

By: Pedrosa Do Vale L.\textsuperscript{1}, Charrua A.\textsuperscript{2}, Cavaleiro H.\textsuperscript{2}, Avelino A.\textsuperscript{2}, Lopes T.\textsuperscript{3}, Birder L.A.\textsuperscript{4}, Cruz F.\textsuperscript{3}

\textsuperscript{1}Faculdade de Medicina da Universidade do Porto, Dept. of Biomedicine, Porto, Portugal,  
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**Aims and objectives of this presentation**

**528**

Reduced apoptosis of bladder cells for the improved bladder underactivity after transplantation of HGF over-expressing mesenchymal stem cell

By: Song Y.S.\textsuperscript{1}, Lee H.J.\textsuperscript{2}, Song E.S.\textsuperscript{3}, Kim J.H.\textsuperscript{1}, Doo S.W.\textsuperscript{1}, Yang W.J.\textsuperscript{1}, Yun J.H.\textsuperscript{4}, Lee S.J.\textsuperscript{5}

\textsuperscript{1}Soonchunhyang University College of Medicine, Dept. of Urology, Seoul, South Korea,  
\textsuperscript{2}Chungbuk National University College of Medicine, Medical Research Institute, Cheongju, South Korea,  
\textsuperscript{3}Gwangjin-Gu Health Center, Medical Treatment Division, Seoul, South Korea,  
\textsuperscript{4}Soonchunhyang University College of Medicine, Dept. of Urology, Gumi, South Korea,  
\textsuperscript{5}Kyunghee University Hospital, Dept. of Urology, Seoul, South Korea

**Aims and objectives of this presentation**

**529**

Development of chronic bladder ischemia rat model for reproducing the detrusor underactivity

By: Ryu C-M.\textsuperscript{1}, Yu H.Y.\textsuperscript{1}, Kim M.\textsuperscript{1}, Shin J.H.\textsuperscript{1}, Shin D-M\textsuperscript{2}, Choo M.S\textsuperscript{1}

\textsuperscript{1}Asan Medical Center, Dept. of Urology, Seoul, South Korea,  
\textsuperscript{2}Asan Medical Center,
Dept. of Biomedical Sciences, Seoul, South Korea

**Aims and objectives of this presentation**

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**The nicotine-induced alterations in oxidative stress parameters in the rat bladder**

By: Tsounapi P. ¹, Honda M. ¹, Teraoka S. ¹, Kimura Y. ¹, Hikita K. ¹, Zachariou A. ², Sofikitis N. ², Saito M. ³, Takenaka A. ¹

¹Tottori University Faculty of Medicine, Dept. of Urology, Yonago, Japan, ²University of Ioannina School of Medicine, Dept. of Urology, Ioannina, Greece, ³Kochi Medical School, Dept. of Pharmacology, Nankoku-shi, Japan

**Aims and objectives of this presentation**

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**Role of corticotropin-releasing factor on bladder function in rats with psychological stress**

By: Seki M., Zha X-M., Ito H., Aoki Y., Matsuta Y., Taga M., Inamura S., Yokoyama O. School of Medical Science, University of Fukui, Dept. of Urology, Fukui, Japan

**Aims and objectives of this presentation**

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**MicroRNA-126 transferred by extracellular vesicles of human adipose-derived stem cells enhances regenerated bladder angiogenesis via SDF-1α/CXCR4 pathway**

By: Xiao D., Lu M., Yan H., Lv X.G., Zhang M. Shanghai Renji Hospital, Dept. of Urology and Andrology, Shanghai, China

**Aims and objectives of this presentation**

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**Inhibition of detrusor contractions by the LIM kinase inhibitors, SR7826 and LIMKi3: A new anti-contractile strategy and implications for a role of LIM kinases in the control of detrusor muscle**

By: Yu Q. ¹, Hennenberg M. ², Wang R. ², Wang X. ², Li B. ², Duan X. ¹, Zeng G. ¹

¹The First Affiliated Hospital Of Guangzhou Medical University, Dept. of Urology, Guangzhou, China, ²Ludwig Maximilian University of Munich, Dept. of Urology, Munich, Germany

**Aims and objectives of this presentation**

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**Dysregulation of phospholamban and beta 3-adrenergic receptor expression might lead to bladder detrusor overactivity via SERCA inhibition**

By: Monastyrskaya K. ¹, Besic M. ¹, Hashemi Gheinani A. ¹, Burkhard F.C. ²
Large-conductance voltage- and calcium-activated potassium channels regulate contraction function of human bladder smooth muscle cells under hydrostatic pressure

West China Hospital, Sichuan University, Dept. of Urology, Laboratory of Reconstructive Urology, Chengdu, China

Partial inhibition of activin receptor-like kinase 4 alleviates bladder fibrosis caused by bladder outlet obstruction

By: Wang N., Shen H., Qi J.
Xin Hua Hospital Affiliated to Shanghai Jiao Tong University School of Medicine, Dept. of Urology, Shanghai, China

Inhibitory effect of tibial nerve stimulation on the micturition reflex in the rat

By: Jianwen Z., Jiang C., Li W., Liao J.
The Sixth Affiliated Hospital of Guangzhou Medical University, Dept. of Urology, QingYuan, China

Urinary miRNA profiles discriminate between BPO patients and healthy controls

By: Kueffer M., Besic M., Hashemi Gheinani A., Vassella E., Schneider M., Burkhard F.C., Monastyrskaya K.
1University of Bern, Dept. of BioMedical Research, Bern, Switzerland, 2University of Bern, Institute of Pathology, Bern, Switzerland, 3University Hospital, Dept. of Urology, Bern, Switzerland

The circadian rhythm of bladder clock genes in spontaneously hypertensive rat

By: Kimura Y., Honda M., Sasaki R., Panagiota T., Morizane S., Hikita K.
### Molecular characterization of bladder pain syndrome identifies functional mRNA-microRNA regulatory modules

**By:** Hashemi Gheinani A., Burkhard F., Rehrauer H., Aquino Fournier C., Rémi B., Monastyrskaya K.

1University of Bern, Urology Research Laboratory, Dept. of BioMedical Research, Bern, Switzerland, 2University Hospital, Dept. of Urology, Bern, Switzerland, 3ETH Zurich, Functional Genomics Center, Zurich, Switzerland, 4University Hospital, Interfaculty Bioinformatics Unit, Bern, Switzerland

**Aims and objectives of this presentation**

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### What factors affect both urethral and rectal function in a female rat model?

**By:** Kitta T., Ouchi M., Kanno Y., Higuchi M., Togo M., Takahashi Y., Moriya K., Shinohara N.

Hokkaido University, Dept. of Urology, Sapporo, Japan

**Aims and objectives of this presentation**

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